

What is claimed is:

1. A method of constructing a test, comprising:
selecting a test item for inclusion in a set of selected test items;
updating at least one evaluation statistic based on the selected test item; and
revising the set of selected test items to substantially correlate the at least one evaluation statistic with at least one specification for a test.
2. The method of claim 1 wherein the test item is selected at least in part based on a subject matter for the test item.
3. The method of claim 1 wherein the at least one evaluation statistic is selected from a group including content specifications and psychometric specifications.
4. The method of claim 1 wherein the at least one specification is selected from a group including content specifications and psychometric specifications.
5. The method of claim 4 wherein the content specifications comprise one or more of the following:
a number of test items to be presented in each of one or more pre-determined formats;
a total number of test items to be included in the set of selected test items;
a number of test items for testing each of one or more pre-determined subject matters;
a key distribution;

- a percentage of test items having one or more pre-defined characteristics;
- a gender or racial orientation of test items; and
- a language in which the test items are presented.

6. The method of claim 4 wherein the psychometric specifications comprise one or more of the following:

- an overall test difficulty rating;
- a correlation between a correct response for a selected test item and a particular cognitive or behavioral trait;
- an orientation of the presentation of questions and answers for the set of selected test items;
- a number of pages of text for a test;
- a mean point-biserial;
- a mean r-biserial; and
- an arrangement of the set of selected test items.

7. A method for constructing a test, comprising:

- selecting a portion of a test item database from which to select a set of test items for a test, wherein the test includes one or more test specifications;
- displaying information concerning a plurality of test items in the selected portion of the test item database;
- examining a test item on a display device;
- selecting the test item for the test; and

updating a value for at least one test specification based on specified properties for the selected test item.

8. The method of claim 7 wherein selecting a portion of a test item database comprises selecting a portion of a test item database based on a subject matter for test items contained within the portion of the test item database.

9. The method of claim 7 wherein examining a test item comprises viewing one or more of the following:

- an image of the test item;
- statistical properties of the test item;
- text passages associated with the test item;
- an answer key;
- detailed content specifications;
- reviewers' comments;
- scoring guidelines; and
- artwork associated with the test item.

10. The method of claim 7 wherein the statistical properties comprise one or more of the following:

- a percentage of correct responses for the test item;
- t-biserials;
- r-biserials;

item response theory parameters;
gender-based response statistics;
race-based response statistics;
a percentage of responses choosing each distractor; and
a frequency of previous usage for the test item.

11. The method of claim 7 wherein updating a value for at least one test specification includes using item response theory.

12. The method of claim 7, further comprising:
comparing current values for the one or more test specifications with required values for the one or more test specifications.

13. The method of claim 7, further comprising:
replacing one or more test items in the set of selected test items based on the one or more updated specifications.

14. The method of claim 7, further comprising:
adding one or more test items to the set of selected test items based on the one or more updated specifications.

15. The method of claim 7, further comprising:
- removing one or more test items from the set of selected test items based on the one or more updated specifications.
16. A system for constructing a test, comprising:
- a processor;
- a computer-readable medium operably connected to the processor; and
- a display,
- wherein the computer-readable medium contains one or more databases each having a plurality of test items, wherein each test item comprises:
- a textual question and one or more answers for the test item,
- a content structure of the test item, and
- one or more statistical properties for the test item.
17. The system of claim 16 wherein the statistical properties comprise one or more of the following:
- a percentage of correct responses for the test item;
- t-biserials;
- r-biserials;
- item response theory parameters;
- gender-based response statistics;
- race-based response statistics;
- a percentage of responses choosing each distractor; and

a frequency of previous usage for the test item.

18. The system of claim 16 wherein the computer-readable medium further comprises:

content specifications for a test; and

psychometric specifications for the test.

19. The system of claim 18 wherein the processor evaluates the content specifications and psychometric specifications for a test while the test is being created, wherein the processor determines a correlation value between the properties of the plurality of test items for the test and the content specifications and psychometric specifications for the test, and wherein the display displays the correlation value.

20. The method of claim 16 wherein the computer-readable medium further contains instructions for performing a method of constructing a test comprising:

selecting a test item for inclusion in a set of selected test items;

updating at least one evaluation statistic based on the selected test item; and

revising the set of selected test items to substantially correlate the at least one evaluation statistic with at least one specification for a test.